Mountain View Corridor

SR-111 Elimination Report

July 14, 2005

ENVIRONMENTAL

IMPACT STATEMENT

Purpose

In July 2004, the MVC EIS Team released the MVC EIS Alternative Screening Report to the public and resource agencies. The purpose of this report was to provide a detailed summary of the MVC alternative development, the screening process, and the screening results.

Results of SR 111 Alternative Screening

During the MVC scoping process, about 275 people submitted a total of more than 700 comments. The MVC EIS Team reviewed and distilled comments into more than 300 suggested actions and/or alternatives. One of the suggested alternatives was converting SR 111 into a freeway. This alternative was evaluated as part of Level 1 screening.

In the July 2004 Alternatives Screening Report, a freeway on SR 111 was eliminated from consideration as an alternative for the following reasons:

- The travel model sensitivity analysis performed by the MVC team during the Envision Utah Growth Choices process (with the Expansive Scenario which had a freeway at SR 111) showed that a major facility on SR 111 would have limited use compared to a facility that was more geographically centered in the study area.
- The sensitivity analysis also showed that SR 111 is too far west to meet north-south travel demand. Model runs for the analysis found that motorists will not travel that far out of direction.
- Spacing analysis completed in the WTC study using the guidelines in the *Highway Capacity Manual (HCM)* also supported eliminating this alternative.
- Because SR 111 runs through the center of historic downtown Magna, this alternative would impact numerous historic buildings that might be Section 4(f) properties.
- Constructing a freeway along SR 111, instead of a freeway in the powerline corridor, is not consistent with local planning policies, including the principles in the Growth Choices "Vision."

Public Comments on Alternative Screening Report

In August and September 2004, the Alternative Screening Report was presented to the public and resource agencies. Information was provided through public meetings, flyers, and press releases and on the project Web site. During this comment period, many comments stated that SR 111 should not have been eliminated as an alternative and should be studied in detail in the EIS. A number of the comments suggested that there would be fewer residential impacts on SR 111 and that the proposed alternative was not that much farther west than the 7200 West Alternative and therefore should provide the same benefit to travel in the study area.

Additional Evaluation of SR 111 Alternative

Based on the amount of public comments received during the Alternative Screening Report comment period, as well as the availability of an updated traffic model (see Technical Report #05, Overall Travel Demand Modeling Methodology, UDOT 2005), the MVC EIS team decided to conduct an additional evaluation of SR 111 to determine if the alternative should be carried forward for detailed study in the EIS. The evaluation looked at travel demand, potential relocations, impacts to historic buildings and wetland impacts, and previous planning studies evaluating transportation needs in western Salt Lake County.

Revised Travel Demand Modeling

To further evaluate the SR 111 alternative, a revised travel demand model run was conducted to verify the initial sensitivity analysis conducted as part of the Growth Choices process which showed limited use of the SR 111 Freeway Alternative. For the supplemental evaluation the most recent version of the travel demand model was used to determine how much this alternative would be used and to what extent would it reduce the amount of average daily travel on north-south surface streets.[1] Table 1 provides an overview of the evaluation.

Table 1: Comparison of Travel Demand Evaluation

	SR 111 Freeway	7200 W Freeway	7200 W Percent Change from SR 111	5800 W Freeway	5800 W Percent Change from SR 111
Average Daily Traffic on MVC by Alternative	143,000	169,000	18%	179,000	25%
Study Area North-South Average Daily Traffic on Surface Streets	120,000	112,000	-7%	106,000	-12%

As shown in Table 1, the SR 111 Freeway Alternative attracts fewer users than the other alternatives. It would have the least amount of use because it is located at the far western edge of the Study Area and thus requires out-of-direction travel for those heading in a northeasterly direction towards Salt Lake City. The travel demand modeling demonstrates that the SR 111 Freeway Alternative would attract 18% fewer trips than the 7200 West Freeway Alternative and 25% fewer than the 5800 West Freeway Alternative.

[1] The alternatives analysis in the July 2004 Alternatives Screening Report was based on Version 3.2 of the Wasatch Front Regional Council's traffic model, which was the most current model available at that time. After that report was released, the Council adopted an updated model, which is known as Version 4.2. The additional travel modeling presented here for the SR 111 alternative was performed using Version 4.2.

One of the main needs of the MVC project is to reduce congestion on north-south surface streets in the Study Area. As noted in the purpose statement developed for the EIS, the MVC project should improve regional mobility for automobile, transit, and freight trips by reducing roadway congestion on roadways serving the major north-south travel movements. As shown in Table 1, the SR 111 Alternative would result in 7% more daily traffic on north-south surface streets compared to the 7200 West Freeway Alternative and 12% more than the 5800 West Freeway Alternative.

Evaluation of Potential Relocations, Impacts to Historic Buildings, and Wetland Impacts

In addition to the revised travel demand modeling, potential residential and business relocations, impacts to historic buildings, and wetland impacts were evaluated. The process consisted of developing two alternative alignments for SR 111. The first alternative would be a freeway along the entire length of the corridor using a 328-foot right-of-way. The second alternative would be an arterial with a 150-foot right-of-way from I-80 to SR 201 and a freeway from SR 201 south. The highway and arterial right-of-way widths are the same as those used for the other alternatives evaluated during the screening process. Table 2 provides an overview of the potential impacts from SR 111 compared to the alternatives that are being carried forward for study in the EIS. See also Figure 1 for data on historic resources.

Table 2: Comparison of Alternatives

	SR 111 Freeway	SR 111 Arterial [b]	7200 W Freeway	7200 W Arterial	5800 W Freeway	5600 W Freeway
Relocations[a]	325	323	300	300	227	229
Historic buildings[c]	170	170	15	15	20	20
Wetlands	45	24	44	20	34	35

[a] Includes both residential and business relocations.
[b] SR 111 Arterial north of SR 201
[c] Historic building impacts were based on the SR 111 Cultural Resource Reconnaissance Technical Memorandum, SWCA Inc, February 11, 2005

Relocations. As shown in Table 2, the SR 111 alternatives would have the highest number of relocations—about 23 more than the 7200 West Alternatives.

Alignments to the west or east of SR 111 would go through heavily developed residential areas without major existing arterials such as SR 111 to place an MVC facility. The only north-south through street besides SR 111 is 8000 West which is a two lane local residential road. Any alternative placed on this alignment would also result in a high number of residential impacts since the street is lined with residential properties on both sides at a density similar to SR 111. In addition, an alignment in the area between SR 111 and 7200 West would need to avoid the ATK property to the south by either connecting to SR 111 or 7200 West before 4100 South. In summary without out a major arterial east or west of SR 111, MVC would have to be place on much smaller surface streets requiring greater widening and thus a high number of relocations.

Historic Resources. The SR 111 alternatives would have substantially higher impacts to historic buildings (between 150 and 155 more) compared to the other alternatives. The historic buildings (typically constructed before 1963) would also be considered Section 4(f) properties under FHWA regulations. Under FHWA 4(f) regulations, FHWA cannot approve the use of any significant historic site unless a determination is made that there is no feasible and prudent alternative to the use of land from the property, and the proposed action includes all possible planning to minimize harm to the property resulting from such use. In the case of MVC alternatives, the 7200 West Alternatives and the 5800 West and 5600 West Alternatives provide feasible and prudent alternatives to SR 111 with substantially fewer 4(f) uses.

In addition to an alignment on SR 111, an alternative further west and east was also investigated. Review of a historic reconnaissance survey conducted for Magna shows that the town west of SR 111 contains 845 historic buildings and a community park that is a documented historical site (Figure 1). Thus an alignment west of SR 111 in the town of Magna would likely result in greater impacts to historic structures. West of the town of Magna there is the Pleasant Grove cemetery, which was established in 1883 and the historical Magna Mill and its associated railroads, canals, flumes, etc. In addition, there is potential for encountering the remains of the historical site of Ragtown, where mill workers set up housing. If anything remains of this site, it would be a significant site given the various ethnic minorities that lived there and the research questions that could be explored (Figure 1). Therefore, an alignment west of Magna would also result in impact to historic resources.

An area east of SR 111 to 7200 West was also reviewed using topographic maps, aerial photographs, and online records from the Salt Lake County Assessor's Office. This data showed that an alignment between SR 111 and 7200 West would impact a number of historic properties. The data review indicates that there is significant pre-1963 residential development along the east west corridors of 2700 South, 2820 South, 3100 South, and 3500 South, and also along the north-south corridor of 8000 West, north of 3500 South. About 140 properties were counted using maps and air photos along these corridors. The online records of the Salt Lake County Assessor suggest that a majority of these properties are still present along these corridors and were constructed prior to 1960; many were constructed during the 1910s and 1920s and thus would be considered historic properties. In addition, examination of the maps and aerial photographs also indicates that at least three pre-1963 subdivisions are present in the area south of 3100 South and between roughly 7400 West and SR 111. Random spot-checking of 50 parcels within these subdivisions using the Salt Lake County Assessor's Office's online records confirmed that a significant number (approximately 80% of those sampled) of the primary buildings were constructed prior to 1960 and would be considered historical for the purpose of this environmental analysis.

Additionally, a greater number of historical agricultural properties appear from aerial photographs and maps to remain intact in the area between 7200 West and 8000 West than they do either east of 7200 West or west of SR 111. These historical farmsteads are relatively rare in this area as more and more are being subdivided for modern housing developments. Intact farmsteads generally get slightly higher consideration for historical value and preservation in place than other property types.

Therefore, an alignment east of SR 111 would also result in impact to historic resources including both residential structures and farmsteads.

Wetlands. The wetland impacts from the SR 111 Alternative are within the range of impacts from the other alternatives evaluated. Note that the acreage shown in Table 2 are from screening level NWI wetland evaluation maps.

Planning Considerations

A freeway on SR 111 has been considered in various planning documents since 1997. In the 5600 West/Jordan Narrows Area Transportation Corridor Major Investment Study (March 1997) a freeway on SR 111 was considered but eliminated because it was determined to be too far west to serve north-south demand and would generate too much out-of-direction travel. It was also determined that the alternative would have significant impacts to the Magna Community.

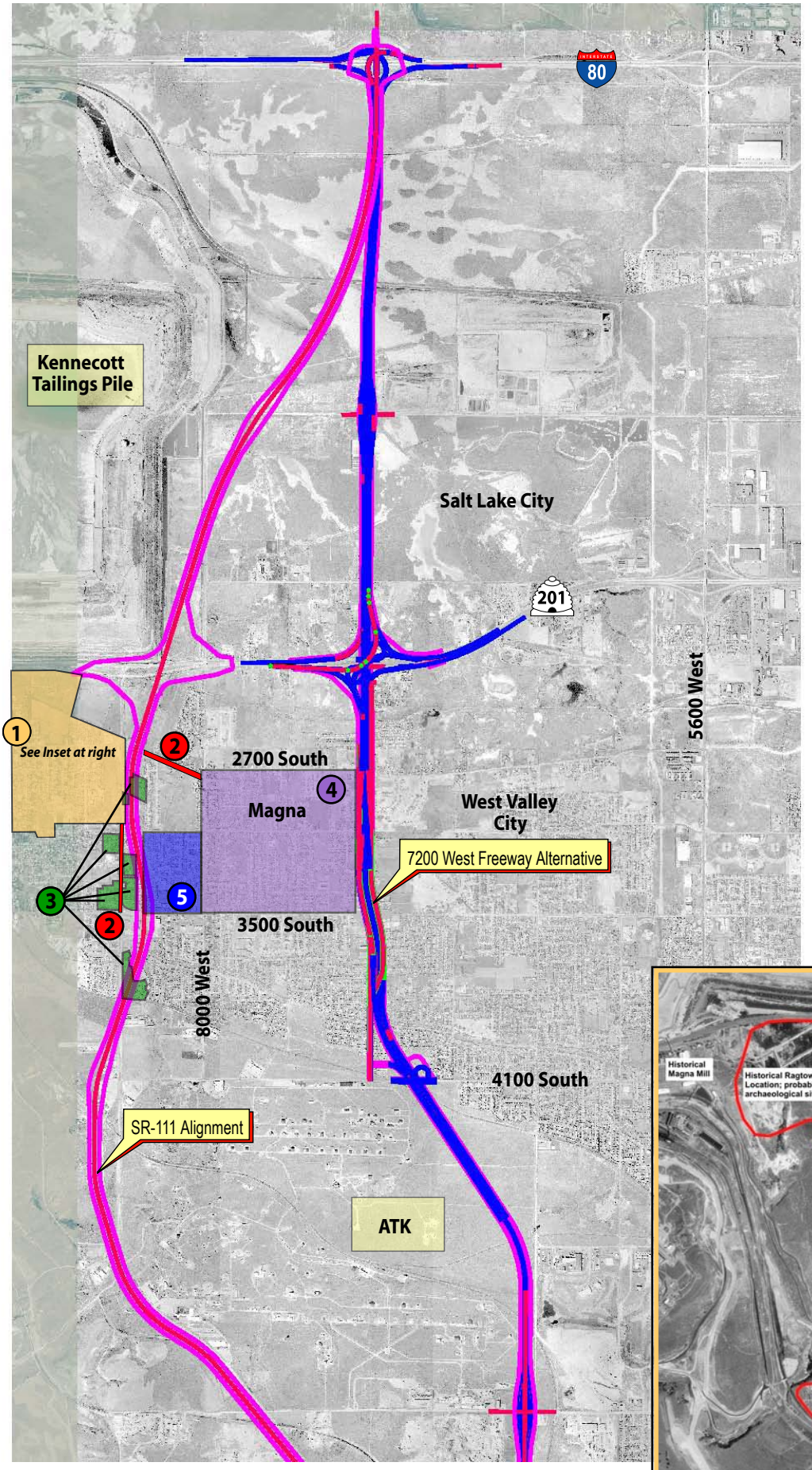
The Western Transportation Corridor Study also considered SR 111 as a potential option for addressing north-south travel demand (WFRC 2001). The analysis determined that a Freeway on SR 111 would have the least amount of benefit to future travel demand on the local network when compared to alternatives on 5600 West and 7200 West and would have a greater impact on the community. As part of the Western Transportation Corridor study a freeway spacing analysis was also conducted. The purpose of the analysis was to determine the best location for a freeway west of I-215 using the methodology established in *National Cooperative Highway Research Report 365, Travel Estimation Techniques for Urban Planning*. The analysis concluded that a new highway should optimally be placed between 5700 West and 6000 West although a highway within a ½ mile of this location could also be justified. SR 111 is about 5 miles west of this corridor.

During the Growth Choices process, the local communities did not support a freeway on SR 111 because it did not provide enough benefit to the travel demand in the study area compared to the 5800 West Alternative. Instead, the communities adopted a Vision that includes a freeway closer to the center of the Study Area, in the powerline corridor. The local communities did support future expansion of SR 111, after completion of a freeway in the powerline corridor, in order to serve growth that is expected in the area by 2030. This potential expansion of SR 111 supported by the communities was provided to WFRC to consider in the Long-Range Transportation Plan. The current WFRC 2030 Long Range Transportation Plan which was prepared prior to the Growth Choices process shows SR 111 being expanded as an arterial from two to four lanes between SR 201 and 3500 South and between 5400 South and 11800 South in the period between 2023 and 2030.

Conclusion

After review of the SR 111 additional data, the MVC team has decided to eliminate the alternative from further study. The decision was based on the fact that the alternative provided the least benefit to north-south travel in the study area, has more relocations, and substantially more

historic homes (4f properties) impacts compared to the other alternatives being carried forward for study in the EIS. In addition, as a result of the high number of historic building impacts the alternative is not likely to be approved pursuant to 4(f). An alignment west and east of SR 111 was also reviewed but eliminated from consideration because of the high number of historic sites in the Magna area and the area between SR 111 and 7200 West. The evaluation also considered other planning studies conducted prior to MVC which concluded SR 111 was too far west to serve the majority of north-south travel demand in western Salt Lake County. Based on all of these factors the SR 111 alternative was determined not to be a reasonable alternative.



MOUNTAIN VIEW CORRIDOR

ENVIRONMENTAL IMPACT STATEMENT

Elimination of SR-111 Alternative

July 2006

LEGEND:

1. Historic Magna Core area and Parks (See Inset Below)
2. Historic Corridors
3. Historic Subdivisions
4. 140 Eligible Historic Properties
5. Three subdivisions built before 1963

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NOT TO SCALE